AMERICAN MUSEUM NOVITATES

Number 710 — Published by THE AMERICAN MUSEUM OF NATURAL HISTORY New York City — April 7, 1934

59.57, 7 (6)

NOTES AND DESCRIPTIONS OF AFRICAN DIPTERA

BY C. H. CURRAN

A number of the species described in this paper were collected by Prof. T. D. A. Cockerell and party during their visit to Africa a few years ago, while others were received from Mr. Alexander Cuthbertson or collected during museum expeditions. The types are in The American Museum of Natural History.

MYDAIDAE

Three species were collected by Dr. Cockerell and party.

Leptomydas nivosus Gerstaecker

GERSTAECKER, 1868, Stett. Ent. Zeitg., XXIX, p. 83.

Male, Nieuwoudtville, Cape Province, November 20 (J. Ogilvie).

Leptomydas humeralis Gerstaecker

GERSTAECKER, 1868, Stett. Ent. Zeitg., XXIX, p. 82.

Male, Calvinia, Cape Province, November 12 (T. D. A. Cockerell).

Nomoneura partita Gerstaecker

Cephalocera partita GERSTAECKER, 1868, Stett. Ent. Zeitg., XXIX, p. 80.

Male and female, Calvinia, Cape Province, November 14, 16 (Alice Mackie).

The male agrees with Gerstaecker's description except that the veins of the wings are bordered with brown, the posterior border cinereous, and the veins are brown, instead of being luteous. It seems likely that the original description was based on a specimen with faded wings. The female is black and has only black hair on the head and abdomen. The legs are reddish, the femora reddish brown, the posterior pair mostly blackish. The two sexes undoubtedly belong together.

It is impossible to be certain of the identity of the specimens placed here and I had considered them as representing an undescribed species. They are much larger than *callosa* Wiedemann (measuring 13 and 15 mm.) and disagree in having the base and apex of the abdomen black. Wiedemann's description calls for a species in which the male has brownish-yellow abdomen, but as recognized by Bezzi the abdomen is brownish or

black and I doubt the correctness of the determination. *N. callosa* is said to have white hair on the back of the head in the male, but in Bezzi's examples the hair was described as brownish; in the male and female before me it is yellowish on the face and front and black on the occiput in the male and all black in the female. It seems likely that there are several distinct species related to *callosus* or all the forms represent a single variable species and the matter can only be cleared up by the examination of abundant material and the comparison of the male genitalia.

ASILIDAE

NEOLAPARUS Williston

I have not been able to include all the African species referred to this genus in the following key as the descriptions are not always sufficiently detailed to permit using important characters.

TABLE OF SPECIES

1.—Two oral bristles.....2.
Four or six oral bristles.....13.
2.—Third antennal segment clubbed, small basally.....4.
Third antennal segment elongate and with almost parallel sides, with very few hairs above.....3.
3.—Face shining, pale yellow, with an oval black spot on the upper half (Congo). *longicornis* Curran.
Face yellow, without black spot; oral bristles yellow.....23.
4.—Wings rich brown, the cells sometimes paler.....5.
Wings at most pale brownish or tinged with brown.....6.
5.—Antennae mostly reddish, the third segment largely brown, the first sometimes mostly reddish brown; legs of male with thick hair..*moerens* Wiedemann.[1]
Antennae black.....*morio* Bezzi.
6.—Front with black or brown spot or mostly dark.....7.
Face and front yellow; oral bristles white; legs yellowish brown, slender; abdomen brownish red, the second and third segments yellow.*gracilipes* Loew.
7.—Front brassy yellow pollinose with small black spot above the antennae; abdomen reddish, with lateral pollinose spots.....*pulchriventris* Loew.
Front not brassy yellow except laterally, if somewhat so the abdomen extensively pollinose and not reddish.....8.
8.—Face reddish brown in ground color and yellowish pollinose, twice as high as wide.....9.
Face reddish or yellow in ground color, or white pollinose.....10.
9.—Black mesonotal vitta greatly narrowed in front and behind.....*ophion* Speiser.
Black mesonotal vitta but little narrowed in front and behind. *holotaenia* Speiser.
10.—Face with yellow hairs.....11.
Face with black hairs, brownish yellow in ground color.....24.

[1]Cf. *pedunculatus* Loew.

11.—Prothorax with blackish spot above or almost wholly black in ground color..12.
Prothorax wholly pale.....*oralis* Van der Wulp.
12.—Prothorax almost wholly black in ground color, yellow pollinose; abdomen black, with gray pollen.....*bivittatus*, n. sp.
Prothorax reddish yellow with black spot above, the pollen yellowish; abdomen reddish.....*similis* Curran.
13.—Oral setae black.....14.
Oral setae whitish or yellowish.....18.
14.—Abdomen reddish, the first segment black; scutellum black with white pollinose border.....*caliginosus* Loew.
Abdomen much more extensively black.....15.
15.—Wings dark brown; second and third abdominal segments mostly reddish. *funestus* Loew.
Wings at most pale brownish; abdomen usually wholly black or brown....16.
16.—Wings hyaline.....*clausus* Loew.
Wings distinctly brownish.....17.
17.—Base of wings broadly sub-hyaline.....*squalidus* Loew.
Wings evenly pale brownish, with lighter or darker apex.....22.
18.—Four oral bristles.....19.
Six strong oral bristles.....21.
19.—Abdomen black, with red fasciae.....*banana* Curran.
Abdomen ferruginous or black.....20.
20.—Abdomen ferruginous, the first segment with a black spot...*aulicus* Wiedemann.
Abdomen black.....*melasomus* Loew.
21.—Antennae brownish yellow, the third segment darker.....*laticornis* Loew.
Basal antennal segments blackish.....*bicolor* Loew.
22.—Middle of face wholly shining brown.....*albicinctus* Ricardo.
Face pale yellow pollinose.....*tabidus* Loew.
23.—Abdomen wholly black.....*apertus* Karsch.
Abdomen blackish with reddish-brown spots and gray pollionose segmentations. *angusticornis* Ricardo.
24.—Abdomen with pollinose bands on basal segments.....*silaceus* Hermann.
Abdomen without pollinose bands.....*cuneatus* Loew.

Neolaparus bivittatus, new species

Black with olive-gray pollen; legs mostly reddish; face with white pile. Length, about 18 mm.

MALE.—Face yellow in ground color, whitish pollinose with yellow tinge in the middle; oral bristles whitish, the face with numerous fine, yellowish-white hairs, not wider than long. Front brown in ground color, densely yellowish pollinose, becoming darker above. Occiput white pollinose and white pilose, above with brownish pollen and yellow pile, the pair of bristles yellowish, a few of the hairs behind the vertex brown. Palpi black; bearing black hair. Antennae pale brownish, the second segment, tip of the first and base of the third, reddish yellow, the hair black above, whitish below; third segment clavate.

Thorax blackish in ground color, the humeri yellow; pleura with whitish pollen which becomes yellowish above. Mesonotum with rather olive-yellow pollen leaving

a pair of entire dark brown vittae, clothed with rather long, fine, yellowish-white hair, that in front of the scutellum black; pleura with white hair. Scutellum dark brown with pale border, the apex brownish, the sides white; hair black.

Legs reddish, the femora and anterior and posterior tibiae brown above; hair black, dense and forming lateral fringes on the apical half or more of the posterior four tibiae and on their tarsi, the bristles yellowish white; tarsi brown; coxae white pollinose and pilose.

Wings cinereous hyaline; squamae yellow; halteres pale yellow, with brown knob.

Abdomen blackish in ground color, cinereous pollinose on the sides, becoming brownish on the disc, on the second to fourth segments the gray pollen forming broad basal cross-bands, the first segment almost all pale pollinose; hair black, pale yellowish on the first segment, sides of the second and third and on the basal four sternites; genitalia black and with rather thick black hair, the lower lamellae partly reddish.

FEMALE.—Thorax with narrower brown vittae and with only scattered, very short black hairs; scutellum pale brown on the disc; front tibiae mostly brown, the others reddish yellow with dark reddish apices, the tarsi dark reddish, becoming black apically; hair of the legs wholly short and not forming lateral fringes. Abdomen more olive-gray, the black dorsal spots much smaller and appearing brown in some views; genitalia shining black. Scutellum with extremely short black hairs.

TYPES.—Holotype, male, allotype, female, and paratype, female, Hartley, Southern Rhodesia, November, 1930; paratype, female, Hartley, December, 1930 (A. Cuthbertson). The allotype was preying on *Glossina morsitans*.

Superficially this species closely resembles *angusticornis* Ricardo, but the antennae are short. It also resembles *silaceus* Hermann in the color of the pollen of the thorax, but the abdomen is differently colored and the face has yellow hair. Miss Ricardo does not mention any hair on the face of *angusticornis*, but there are a few minute hairs near the mystax. Mr. Cuthbertson took a male and female of *angusticornis* at Hartley in January 1931.

Stenopogon holoxanthus Hermann

HERMANN, 1907, Zeitschr. für Hymenopt., VII, p. 1.

Female, Nieuwoudtville, Cape Province, November 22 (T. D. A. Cockerell).

Miss Ricardo has suggested that this species may be the same as *dilutus* Walker but the palpi have yellow hair, whereas *dilutus* has the hair black. The hair on the specimen before me is paler than described by Hermann but, inasmuch as Hermann described the male, this may be a sexual difference. The apical abdominal segments are black only on the dorsum and on the narrow apices.

Gonioscelis ventralis Schiner

SCHINER, 1867, Verh. zool.-bot. Ges Wien, XVII, p. 363.

Two specimens of each sex, Salibury, Southern Rhodesia, January 25, 1910, December 23, 1911, and January 1922.

ACNEPHALUM Macquart

The following key includes the Ethiopian species with the exception of the two described by Walker.

TABLE OF SPECIES

1.—Abdomen with white hair on the disk other than on the apices of the segments. . 2.
Abdomen with white discal hair only on the apices of the segments. . . . . 3.
2.—Median segments mostly white-haired, leaving a black dorsal spot.
dorsale Macquart.
Intermediate segments with transverse, arched patch of white hair in the middle.
platygaster Loew.
3.—Wings pale brown on basal half, wholly hyaline on apical half. . . *cockerelli*, n. sp.
Wings differently colored. . . . . 4.
4.—Pale-haired fasciae rather narrowly interrupted on the intermediate segments; cross-veins strongly clouded; male unknown. . . . . *andrenoides* Wiedemann.
Pale fasciae short, not as long as the black space separating them; wings of male almost wholly brown. . . . . *quadratum* Wiedemann.

Acnephalum cockerelli, new species

Pile mostly whitish, the wings rather pale yellowish-brown on a little more than the basal half. Length, 14 mm.

MALE.—Head white pollinose and pilose, a patch of brownish-red pile on either side of the face between the oral margin and eye and a small patch behind the upper corner of the eye; ocellar hairs with yellowish tinge. Proboscis largely reddish, the hair white; palpi black, white-haired. Antennae brown, the basal segments bearing white hair and pale yellow bristles; style white on apical half.

Thorax black, thickly clothed with white pile streaked with brownish yellow, apparently abraded posteriorly; mesopleura with some bristly yellow hairs posteriorly; mesonotum with some black hairs intermixed with the pale ones; humeri mostly brownish yellow-haired; bristles on sides of the mesonotum brownish yellow. Scutellum shining black, with a deep preapical depression, the apical margin with upturned white hair except in the middle, the disc with sparse white hair only on the sides, the white hair on the back of the mesonotum overhanging the scutellum and giving it the appearance of being white pilose.

Legs black; posterior four femora dark reddish except dorsally; middle tibiae reddish on the dorsal half, the posterior pair reddish with a posteroventral black stripe; tarsi becoming dull reddish apically; hair white, yellowish on the anterodorsal surface of all the femora; bristles brownish yellow.

Wings light brownish on a little more than the basal half, hyaline apically, the cross-veins not clouded; fourth posterior cell broadly open; anterior branch of third vein with long appendage near the base. Squamae with yellow border and whitish fringe. Halteres reddish yellow.

Abdomen shining black, rather densely punctured, the sides and posterior border with dense, rather long white hair, that near the middle of the sides with yellowish tinge; apices of second to fourth segments with narrowly interrupted white pilose fasciae, the pale fasciae on the first and fifth segments very broadly interrupted; apical corners of the third and following segments reddish, the apical segment mostly

reddish, the preceding one with reddish posterior border. Venter with cinereous-yellow pollen and white hair. Genitalia small and mostly concealed by the dense pile.

TYPE.—Male, Nieuwoudtville, Cape Province, November 20 (T. D. A. Cockerell).

Acnephalum andrenoides Wiedemann

Dasypogon andrenoides WIEDEMANN, 1828, 'Ausser. Zweifl.,' I, p. 403.

One female, Nieuwoudtville, Cape Province, November 19 (M. Macgregor).

Acnephalum quadratum Wiedemann

Dasypogon quadratum WIEDEMANN, 1828, 'Ausser. Zweifl.,' I, p. 404.

Male, Nieuwoudtville, Cape Province, November 19 (L. Ogilvie); male, top of Van Rhyn's Pass, Cape Province, November 19 (J. Ogilvie).

These have the wings brown with subhyaline indentations in the cells along the posterior border of the wings. The female described by Wiedemann had the wings wholly hyaline.

Acnephalum platygaster Loew

LOEW, 1858 (1857), Öfvers. Kongl. Vet. Akad. Förhandl., XV, p. 338.

Female, foot of Van Rhyn's Pass, Cape Province, November 21 (Mrs. Cockerell).

SCYLATICUS Loew

The following key will serve to separate the known Ethiopian species.

TABLE OF SPECIES

1.—Mystax yellow ..... *rufescens* Ricardo
Mystax white ..... 2.
2.—Wings hyaline, the cross-veins clouded ..... *varipennis* Ricardo.
Wings largely brownish, brownish gray or cinereous ..... 3.
3.—Wings brownish gray or cinereous and broadly lutescent anteriorly or basally .. 4.
Wings broadly brown in front, hyaline behind ..... *costalis* Wiedemann.
4.—Antennae black ..... *zonatus* Loew.
Antennae reddish, the first segment blackish ..... *pantherinus* Bigot.

Scylaticus zonatus Loew

LOEW, 1858 (1857), Öfvers Kongl. Vet. Akad. Förhandl., XIV, p. 349.

Male, Calvinia, Cape Province, November 13 (T. D. A. Cockerell).

Agrees well with Loew's description but the femora are paler and the tarsi reddish. It may represent a different species.

Scylaticus costalis Wiedemann

Dioctria costalis WIEDEMANN, 1819, Zool. Mag., I, p. 3.

Female, Salisbury, Southern Rhodesia, February 17, 1912.

Ancyclorrhynchus quadrimaculatus Loew

Xiphocerus quadrimaculatus Loew, 1858 (1857), Öfvers. Kongl. Vet. Akad. Förhandl., XIV, p. 348; 1868, 'Dipt.-Fauna Sudafr.,' p. 83.

Female, Nieuwoudtville, Cape Province, November 20 (J. Ogilvie).

Agrees fairly well with Loew's description but the red of the sides of the mesonotum forms an entire stripe, the scutellum is reddish and the hair on the upper part of the occiput is tawny. The black palpi bear stout black hairs although some toward the apex are tawny.

Ancylorrhynchus apicalis, new species

Colored almost as in *cruciger* Loew, but the fourth posterior cell is very broadly open. Length, 15 mm.

Female.—Head black in ground color, the face reddish with a narrow, median black V extending downward from the base of the antennae. Front brownish-yellow pollinose except in the middle, the hair yellowish. Posterior orbits broadly ochreous pollinose except below, the pile tawny, paler at the vertex, a few black hairs behind the cheeks. Face clothed with reddish-yellow pollen and pile; cheeks shining black. Proboscis black, with black hair; palpi reddish, bearing coarse black hair. Antennae orange, the basal segment with similarly colored hair, the third almost as long as the head width, the style poorly differentiated.

Thorax black, the sides of the mesonotum very broadly orange-red, the black expanded in front of the suture to form a cruciate marking; pronotum reddish; scutellum reddish with the base narrowly deep black; hair black on the pleura, reddish yellow or yellowish on the dorsum; the hair in front of the halteres tawny.

Legs reddish yellow, the femora reddish; hair white, the fine bristles on the under surface of the anterior four femora black; coxae brownish-gray pollinose and with yellowish hair; anterior tarsi with black hair above, the others with black hair dorsally on only the apical one or two segments; bristles of the femora and tibiae reddish yellow.

Wings luteous, tinged with brown posteriorly, the apical fourth brown; fourth posterior cell very widely open. Squamae yellowish, with pale yellow fringe. Knob of halteres sulphur-yellow.

Abdomen dull orange, the first segment and narrow base and median vitta on the second dull black; bases of second to sixth segments with dull black lateral triangles which extend very narrowly or obscurely across the base of the segment. Venter apparently black, the sternites with pale apices (most of it has been eaten away) seventh segment shining reddish with the sides and base laterally shining black; ovipositor shining reddish. Hair tawny, pale on the venter.

Type.—Female, Matetsi, Southern Rhodesia, April 1933.

Teratopus cyaneus Fabricius

Asilus cyaneus Fabricius, 1781, 'Spec. Insect.,' II, p. 465.

One male, Nieuwoudtville, Cape Province, November 22 (Alice Mackie).

In this specimen the occiput appears much less swollen than in the female figured by Loew, due to the larger eyes.

Damalis Fabricius

The following key will serve to distinguish this genus and the two separated from it by Hermann.

1.—Mesonotum with lateral bristles; mystax reaching almost to the antennae. *Lasiodamalis* Hermann.
Mesonotum without lateral bristles....2.
2.—Apex of the middle tibiae strongly produced....*Lophurodamalis* Hermann.
Middle tibiae not modified....*Damalis* Fabricius.

Lophurodamalis Hermann

Table of Species

1.—Mystax black....2.
Mystax yellowish....*speciosa* Loew.
2.—Tibiae reddish yellow, with black apices....3.
Tibiae black on more than the apical half....*natalensis*, n. sp.
3.—Middle tarsi of male simple; wings pale brown except in front....*simplex*, n. sp.
Third segment of middle tarsi of male very strongly produced; wings rather dark brown....*hirtiventris* Macquart.

Lophurodamalis natalensis, new species

Related to *fervida* Walker but readily distinguished by the color of the legs. Length, 13 mm.

Male.—Head black; face and front with thin brown pollen and black hair; occiput cinereous pollinose and with pale hair, the occipital cilia fine and black. Palpi black, the hair mostly sordid yellow but long and black apically. Antennae black, with black hair.

Thorax black in ground color, the hair yellowish on the pleura, tawny on the dorsum, the disc with black bristly hair. Pollen rather tawny, the disc bare and shining black but with an obscure pollinose stripe along the line of the dorsocentrals and with thin pollen above the humeri, the black extending to the anterior margin in the middle. Hair long on the mesonotum.

Legs shining black, the coxae cinereous pollinose; basal third of the tibiae and of the posterior femora reddish. Anterior four femora with long hair, the posterior pair with short, appressed hair and with black spines on the apical half below. Anterior tibiae with long soft hair on the posterior half, the middle pair clothed with coarse bristly black hair on the lower half, the posterior tibiae with appressed black hair. Middle tibiae strongly produced on the ventral apex, the protuberance bearing short, stout apical bristles; middle tarsi with the fourth segment bearing a stout, ventral, apical process, its length almost equal to the length of the segment, the third segment weakly produced.

Wings brown, somewhat paler behind. Squamae rather tawny, with reddish hair. Knob of halteres brown.

Abdomen reddish yellow, the apex and venter brownish; pile reddish, rather abundant and long, the genitalia with black hair.

Type.—Male, Durban, Natal.

Lophurodamalis simplex, new species

Apparently related to *Discocephala fervida* Walker, a species probably belonging to *Lophurodamalis*, but with paler wings and more extensivelyblack legs. Length, 10 to 11.5 mm.

MALE.—Head black in ground color, the front and face with rich brownish-yellow pollen and black hair, the upwardly curved hairs of the face yellowish; occiput with cinereous pollen and dull yellowish pile. Palpi black, the hair practically all yellow. Antennae black, the third segment smaller than the second, the arista gently widened and colorless apically; basal segments with black bristles.

Thorax ochreous pollinose, the mesonotum decidedly darker on the disc, with three broad brown vittae, the middle one geminate anteriorly, the outer ones short and weakly interrupted at the suture. Hair yellow and rather long, black and coarser along the middle of the mesonotum on the anterior three-fourths. Scutellum luteous, with fine rich yellow hairs and a marginal row of fine, reddish-yellow bristles.

Legs reddish; coxae black, cinereous-yellow pollinose and pilose; trochanters mostly shining reddish; anterior four femora with black stripe anteriorly toward the lower side and with blackish tips, the posterior femora black on the apical half, moderately swollen and with appressed hair and several black spines below on the apical half; anterior four femora with long yellowish hair above and black hair below, the middle pair with black ventral bristles; tibiae, especially the posterior pair, with blackish apices, the hair and bristles black, short on the posterior pair; middle tibiae rather strongly produced apically; tarsi reddish, the tips of the segments blackish, the bristles long and fine, the anterior tarsi with long crinkly hair in addition to the bristles.

Wings light brownish, the costal border brown; anterior cross-vein situated near the apical fourth of the discal cell. Squamae with bright yellow fringe. Knob of halteres reddish.

Abdomen reddish, the apical three segments darkened on the disc, at least basally, thickly clothed with tawny pile, the broad middle line with short, appressed black hair except on the basal two segments; venter broadly black in the middle, thickly cinereous-yellow pollinose and reddish-yellowish pilose. Genitalia shining reddish with the appendages black apically.

FEMALE.—Agrees with the male but the hair and bristles on the legs are shorter and there are no fine, long hairs on the front tarsi; all the tergites with transverse black fasciae basally, the tawny abdominal pile shorter and subappressed. Genitalia reddish.

TYPES.—Holotype, male, allotype, female, and paratype, female, Vumba, Umtali District, Southern Rhodesia, March 3, 17, 19, 1931 (P. A. Sheppard).

DAMALIS Fabricius

The single species before me is very distinct from any thus far described.

TABLE OF SPECIES

1.—Wings dark brown on the basal two-thirds, the apex hyaline..... *conspicua*, n. sp.
Wings differently colored.....2.
2.—Wings pale brown, rather reddish yellow along the costal border.
femoralis Ricardo.

Wings much less extensively brown or wholly hyaline.....3.
3.—Wings hyaline or nearly so.....4.
Wings rather intensively brown basally and in front.....*maxima* Hermann.
4.—Hair of the face black.....5.
Hair of the face yellow, the bristles black.....*pollinaria* Hermann.
5.—Legs reddish yellow.....*hyalipennis* Macquart.
Legs shining reddish-brown.....*pollinosa* Ricardo.

Damalis conspicua, new species

Black, the basal two-thirds of the wing dark brown; legs partly reddish yellow Length, 10 mm.

MALE.—Head with cinereous-white tomentum and without shining areas. Face and front with black hair, the mystax rather bristly; occiput with soft white hair, the beard white. Palpi reddish yellow, clothed with soft white hair. Antennae black, the third segment about as large as the second, the hair black; arista white on the apical third.

Thorax cinereous pollinose, the middle of the mesonotum with brownish pollen on the anterior three-fourths and a pair of narrow, bare vittae on the anterior two-thirds, the outer vittae represented by two bare spots on either side. Hair of the mesonotum black, but white on the posterior calli and on the sides in front of the suture. Pleura with soft white hair. Scutellum bare on the broad apex, bearing four marginal bristles, without hair except on the black margin. Posterior calli bearing two black bristles.

Legs black; coxae cinereous pollinose and white-haired; trochanters partly reddish yellow; anterior and middle femora broadly reddish yellow above, the posterior pair reddish on the posterodorsal half; hair whitish, black on the ventral surface. Anterior tibiae dull reddish on the upper surface of the basal half, the posterior four tibiae dull reddish-yellow on about the upper half; hair white, the bristles very fine and black, the posterior tibiae with black hair below. Tarsi black, the bases of the segments yellowish, the apical segments only narrowly pale basally, the basal segments broadly pale, the anterior tarsi, however, with only the narrow bases of the segments pale; hair black.

Wings brown on the basal two-thirds, the apex hyaline. Squamae with white fringe. Knob of halteres black.

Abdomen black, the bases of the segments rather broadly cinereous, the pollen expanding laterally so as to occupy the whole length of the segment, the first segment wholly pollinose, the second mostly so, the seventh with pollen only on the sides. Venter cinereous pollinose, each segment with a small bare spot. Hair black on the dorsum, whitish on the sides and venter. Genitalia black, the outer forceps mostly cinereous pollinose.

TYPE.—Male, Calvinia, Cape Province, November 14 (L. Ogilvie); received from Dr. T. D. A. Cockerell.

LOPHOPELTIS Engel

The key includes the African species which are sufficiently well described to be placed by means of the characters used.

TABLE OF SPECIES

1.—Mane extending the whole length of the mesonotum....2.
Mane obsolete on the anterior half of the mesonotum....23.
2.—Mane wholly white posteriorly....3.
Mane black on whole length, sometimes bordered with short white hairs....9.
3.—Abdomen with abundant appressed white hair and without black hair on the disc....4.
Abdomen not wholly clothed with white hair....5.
4.—Mystax wholly white; abdomen with white bristles....*molitor* Wiedemann.
Mystax black and white....22.
5.—Scutellum with pale bristles....6.
Scutellum with black bristles....7.
6.—Legs blackish....*spiniventris* Loew.
Tibiae and tarsi reddish....*transvaalensis* Ricardo.
7.—Tibiae reddish, sometimes with black stripe....8.
Tibiae black, the base reddish....*albofasciatus* Ricardo.
8.—Front and middle tibiae with black stripe....*leucotaenia* Bezzi.
Tibiae without black stripe....*ustulatus* Loew.
9.—Abdomen clothed with appressed white hairs only....20.
Abdomen not wholly white-haired....10.
10.—Thorax with light ochre-yellow short hair....*pulcher* Loew.
Thorax without such hair....11.
11.—Hair of scutellum wholly black; tibiae reddish basally; genitalia short. *nigricans* Ricardo.
Hair of scutellum partly white or yellowish....12.
12.—Scutellum with pale bristles....13.
Scutellum with black bristles....14.
13.—Legs wholly black; mane not bordered with white; genitalia small. *rapax* Ricardo.
Tibiae red basally; mane bordered with short white hairs; genitalia large. *natalensis* Ricardo.
14.—Scutellum with two or four tufts of white hair or with yellow hair....15.
Scutellum with white hair in the middle; hairy species with almost wholly black legs....*hirsutus* Ricardo.
15.—Abdomen with black median vitta; scutellum with reddish-yellow and whitish hair....*wroughtoni* Ricardo.
Abdomen sometimes with a row of triangular spots; hair of scutellum differently colored....16.
16.—Scutellum with tufts of white hair....17.
Scutellum with yellow hair....*genitalis* Ricardo.
17.—Scutellum with discal tufts of white hair in addition to the lateral tufts. *montanus* Ricardo.
Scutellum with only the lateral tufts of white hair, the disc usually with black bristly hair....18.
18.—Disc of scutellum with numerous black hairs or bristles....19.
Disc of scutellum with only one or two hairs and about four black bristles in a preapical row....*arno*, n. sp.

19.—Mane bordered with short yellow hairs.....*similis* Ricardo.
Mane not bordered with pale hairs.....*cuthbertsoni*, n. sp.
20.—Male genitalia long and tapering; bristles on the posterior four femora white; length 10 mm.....*parvus* Ricardo.
Male genitalia shorter and but little tapering; bristles on the femora black; length, 13 to 15 mm.....21.
21.—Apex of upper forceps of male transverse and gently emarginate; seventh segment of female broadly white-haired basally.....*angola*, n. sp.
Apex of upper forceps of male gently convex apically; fourth segment of female almost all black-haired.....*incisuralis* Macquart.
22.—Beard yellowish; upper genital lamellae of male a little longer than the lower; tergum with white bristles.....*albovittatus* Schiner.
Beard white; upper genital lamellae of male twice as long as the lower; tergum with black bristles.....*albion*, n. sp.
23.—Mane black and white or yellow.....24.
Mane black; mystax white and black; scutellum with white hairs and bristles. *angustibarbis* Loew.
24.—Mystax wholly yellow, the bristles at the sides of the mouth black. *setiventris* Loew.
Mystax with black hairs above or laterally.....25.
25.—Mane white posteriorly.....*albopilosus* Ricardo.
Mane black and yellow, rather scanty.....*nigripes* Ricardo.

Lophopeltis cuthbertsoni, new species

Black, the extreme base of the tibiae and the halteres reddish; mane wholly black; scutellum white-haired on the sides. Length, 13 to 14 mm.

MALE.—Head whitish pollinose, the front thinly so; ocellar tubercle with thin brown pollen, the face shining beneath the mystax. Frontal hair black. Occiput with white pile, the occipital cilia black, numerous above; beard white. Mystax black, with numerous white bristly hairs in the middle except near the oral margin. Palpi with black hair. Third antennal segment as long as the basal two combined, the arista slightly shorter than the third segment; hair wholly black.

Thorax with whitish pollen, the vittae brownish. Mane moderately long, wholly black, with longer bristles except behind; hair of the mesonotum black, white on the humeri, posterior calli, prothorax and the pleura, and sometimes a few white hairs in front of the scutellum. Scutellum with black hair in the middle and white hair on the sides, the bristles black, arranged in two rows of four.

Legs black; coxae with thick white hair; femora with black hair, the posterior surface mostly white-haired, the posterior pair with an incomplete, narrow stripe of white hair in front; hair on the ventral surface long and fine; bristles black. Tibiae with white hair and black bristles, the long hair on the ventral surface mixed with black, the bristles rather fine. Tarsi brownish red, black-haired, the anterior pair mostly white-haired above, the middle pair with white hair on the upper surface of the basal segments.

Wings with brownish tinge; anterior cross-vein situated near the apical third of the discal cell. Squamae with white fringe. Halteres reddish yellow.

Abdomen with the sides and segmental apices clothed with cinereous-white pollen, the sixth and seventh segments with only a broad median vitta shining, the remaining segments appearing pale pollinose anteriorly when viewed from behind. Hair black on the dorsum, white on the sides, the white hair forming small triangles on the bases of the segments; bristles black, except the lateral one. Venter cinereous pollinose and with white hair and bristles. Genitalia small, the upper forceps slightly tapering, pointed below, the apex oblique and with a small triangle at the upper apical corner; lower forceps short; hair black, moderately dense on the lower surface of the upper forceps.

FEMALE.—Tarsi black and with scarcely any white hair above; tibiae with less long hair below; ovipositor shining black, slightly longer than the eighth segment.

TYPES.—Holotype, male, Salisbury, Southern Rhodesia, September 8, 1912; allotype, Salisbury, March 8, 1918. Paratypes, male, Salisbury, September 20, 1917, and male, September 1927, the latter collected by A. Cuthbertson.

Lophopeltis arno, new species

Black, the immediate base of the tibiae and the halteres reddish; mane wholly black; scutellum without hair on the disc. Length, 13 mm.

MALE.—Head white pollinose, the ocellar tubercle very thinly so, the face shining beneath the mystax. Hair of the front black, a few white hairs opposite the antennae; occiput white pilose, the occipital cilia black and white, the long curved bristles all black; beard white. Mystax black, with rather few white bristly hairs on the upper two-thirds. Palpi with black hair. Antennae black, with short white hair and black bristles; third segment as long as the basal two combined, the arista a little more than half as long as the third segment.

Thorax with cinereous white pollen, the disc of the mesonotum rather bronzed, the vittae indistinct. Mesonotum with black hair, the sides in front and behind, the prothorax and the pleura white-haired; mane wholly black, not extending on to the scutellum, rather sparse, the bristles black. Scutellum with a discal and marginal row of four bristles and with white hair on the sides, the disc bare.

Legs bronzed black, white-haired; coxae thinly cinereous pollinose; posterior femora with erect black hair beneath, the anterior four with a few black hairs apically; tibiae with long brown hair beneath; tarsi black-haired, the anterior pair mostly white-haired above, the middle tarsi with white hair on the basal segment; bristles black, white on the posterior surface of the middle tibiae and front tarsi and the anterior surface of the middle tarsi.

Wings cinereous hyaline; anterior cross-vein situated somewhat beyond the middle of the discal cell and almost transverse. Squamae and halteres reddish yellow, the former with white fringe.

Abdomen with the sides and segmental apices cinereous white pollinose; hair black on the dorsum but the white hair extends strongly inward as large basal triangles; seventh and eighth segments pollinose except on the broad middle line. Venter cinereous white pollinose and white haired. Bristles black. Genitalia white haired, the upper surface with appressed black hair; upper forceps strongly narrowed on the apical fourth, the tips with dense, short stout bristly hairs on the inner surface; lower forceps about one-third as long as the upper.

TYPE.—Male, Melsetter, Southern Rhodesia, October 1921.

Lophopeltis angola, new species

Black, the immediate base of the tibiae and the halteres reddish yellow; mane black, edged by a white line. Length, 14 mm.

MALE.—Head whitish pollinose, the ocellar tubercle almost bare, the face shining beneath the mystax. Front with mostly white hair, the ocellar bristles black. Beard and occipital pile and bristles white, the long curved occipital cilia black, not numerous. Mystax mostly white, the bristles on the sides of the oral margin black. Palpi with black hairs on the apical half. Antennae with white hair and long black bristles; third segment about as long as the basal two combined; style three-fifths as long as the third segment.

Thorax whitish pollinose, the disc of the mesonotum appearing somewhat bronzed in some lights; hair mostly white, but broadly black on the disc in front of and behind the suture; mane strong, edged by a line of somewhat shorter white hairs. Scutellum with long white, not tufted hair, two black discal bristles and four marginals.

Legs black; coxae pale pollinose and white-haired. Hair white, the anterior four femora black-haired in front, the posterior pair with black hair on the ventral third; all the femora and tibiae with long black hairs below, although on the middle and posterior tibiae the long hairs are mostly white; tarsi wholly white-haired above; bristles black, white on the upper surface of the anterior four tarsi and on the posterior surface of the front tibiae.

Wings cinereous hyaline; anterior cross-vein situated somewhat before the apical third of the discal cell. Squamae and halteres reddish yellow, the former with white fringe.

Abdomen wholly clothed with white hair, the sides more thickly and evenly cinereous pollinose than the dorsum; venter cinereous pollinose; bristles almost all black. Genitalia thinly pollinose, short, upper forceps gently tapering and with a gently concave apex, the lower forceps slightly more than half as long as the upper and with thick white hair below.

FEMALE.—Legs with very little long hair below and it is mostly black; posterior and middle tarsi black-haired above except at the base. Thorax with rather ochreous pollen; abdomen with yellowish-cinereous pollen and a black-haired dorsal stripe that is broadly interrupted on the third to fifth segments, the base wholly white-haired; ovipositor one-sixth longer than the seventh segment, black-haired.

TYPES.—Holotype, male and allotype, female, Capelongo, Angola, July 25, 1925, and paratype, female, Pico Avezedo, Angola, July 23–27, 1925.

This species is very similar to the one I have identified as *incisuralis* Macquart but may be readily distinguished by the characters enumerated in the key.

Lophopeltis albion, new species

Black, the immediate base of the tibiae and the halteres reddish yellow; mane black, edged with white, the posterior fourth wholly white. Length, 12.5 mm.

MALE.—Head whitish pollinose, the ocellar tubercle almost bare, the face shining beneath the mystax. Front with white hair, the ocellar bristles black; beard, lower occipital cilia and the occipital pile white, the upper occipital cilia and the long curved bristles black. Mystax white with black bristly hairs intermixed,

wholly black along the oral margin. Palpi with black hair. Antennae with short white hair above and black bristles below; third segment somewhat shorter than the basal two combined, the arista as long as the third segment.

Thorax with whitish pollen, the mesonotum lightly bronzed in some views, the hair white except broadly in front of and behind the suture on the disc. Mane black on the anterior three-fourths, edged with white, the posterior fourth white. Scutellum with thick white hair and bearing eight black bristles arranged in two rows, four on the disc and four on the margin.

Legs black; coxae thinly pale pollinose and white-haired; femora with appressed black hair, the posterior surface of the front pair and the upper surface of the posterior four white-haired, the lower surface with sparse, long black hairs; tibiae with white hair, the hair long below, black beneath the anterior pair. Tarsi white-haired above, the anterior four with white bristles dorsally, the anterior tibiae with a row of white bristles on the apical half of the posterior surface; bristles black.

Wings cinereous hyaline; anterior cross-vein situated moderately beyond the middle of the discal cell. Squamae and halteres reddish yellow, the former with white fringe.

Abdomen wholly white-haired, rather thinly white pollinose, the bristles of the dorsum black, those of the venter mostly white. Genitalia short, becoming reddish apically; upper forceps gently tapering, obtusely rounded apically, the lower forceps about half as long as the upper; hair white.

TYPE.—Male, Capelongo, Angola, July 25, 1925.

CYRTIDAE

Psilodera fasciata Wiedemann

Cyrtus fasciatus WIEDEMANN, 1819, Zool. Mag., I, part 3, p. 14.

Male, Port Elizabeth, October 29 (J. Ogilvie).

Diopsidae

Diopsis cruciata, new species

Related to *apicalis* Dalmann but at once distinguished by the presence on the mesonotum of a very broad longitudinal and transverse band of cinereous pollen. Length, 7 to 8 mm. Width of head: male, 9 to 11 mm.; female, 7 to 9.5 mm.

MALE.—Head reddish, with a brownish stripe along the suture separating the face and front. Ocellar triangle and ends of the eye-stalks black, the latter thinly cinereous pollinose. Front with a gentle swelling in front of the ocelli margined by a slight, subcordate, depression; in front with several low ridges extending at right angles from the suture. Facial spines long and porrect; sides of face almost straight, gently converging below. Eye-stalks with a short, rather fine median bristle and with a stronger one behind the eyes. Antennae reddish, the arista brown.

Thorax shining black in ground color; mesonotum with a very broad median vitta, a slightly narrower transverse fascia immediately in front of the suture and the posterior margin cinereous pollinose; pleura cinereous pollinose with a very large, oval, shining area in the middle. Prothorax shining. Pollen of the scutellum becoming brown apically; scutellar spines reddish, their narrow base and very broad apices blackish. Hair of thorax very fine and pale yellowish.

Legs pale orange, the anterior tibiae and tarsi, basal and apical third of the posterior tibiae, and the apices of the middle and posterior tarsi, brownish. Spur of posterior femora very short.

Wings cinereous hyaline, with a large, subcircular, apical brown spot and broad, pale brownish band extending across the middle and produced, in the apical cell, to inside the anterior cross-vein. Halteres very pale yellowish.

Abdomen reddish, the base broadly and the apices of the intermediate segments brownish, the second segment sometimes darkened in the middle.

FEMALE.—Agrees with the male except that the eye-stalks are shorter and the abdomen slightly broader.

TYPES.—Holotype, male, Tshibinda, August 26, 1931 (Alice Mackie). Allotype, female, Chirinda Forest, Southern Rhodesia, November, 1930 (A. Cuthbertson). Paratypes: three males, Umtali, September, 1927, and female, Chirinda Forest, Southern Rhodesia, November 1930 (A. Cuthbertson); female, "Uganda"; female, Kivu-Lulenga, November 13, 1925 (H. Schouteden).